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Graduate Studies in Marine Science

Nova Southeastern University

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NOVA SOUTHEASTERN UNIVERSITY

Graduate Studies in Marine Science





The Oceanographic Center

The mission of the Oceanographic Center is to carry out innovative, basic, and applied research and to provide quality graduate and undergraduate education in a broad range of marine science and related disciplines. The center serves as a community resource for information, research, and education on oceanographic and environmental issues, as well.

Academic Programs

Institute of Marine and Coastal Studies

The programs and majors within the Institute of Marine and Coastal Studies include the following:

- M.S. degrees in marine biology, coastal zone management, and marine environmental sciences, all with joint options
- Ph.D. degree in oceanography/marine biology
- B.S. degrees offered with the Farquhar Center for Undergraduate Studies through the Joint Science Program
- Dual B.S./M.S. degree options

For the M.S. program, each class meets one evening per week in a three-hour session. Five core courses provide an overview and foundation in the ocean sciences for all degrees. Specialty and tutorial courses provide depth in each program. The center operates on a quarter-term system with 12-week courses. Thesis and capstone review tracks are offered.

M.S. in Marine Biology

This program is designed to offer students a substantial understanding of the nature and ecology of marine life. Program flexibility provides preparation for further graduate study, or career enhancement/employment in technical research, governmental agencies, or environmental consulting firms. Applicants should hold a bachelor's degree in biology, oceanography, or a closely related field.



M.S. in Coastal Zone Management

Leading to a multidisciplinary M.S. degree, CZM is intended for people seeking career enhancement, as well as for recent college graduates. CZM combines elements of ecology, geology, physics, engineering, economics, law, social sciences, and management. A science major is the most useful for the CZM master's degree. However, because of its diverse elements, applicants with any undergraduate major and a science background will be considered for admission.

M.S. in Marine Environmental Sciences

This M.S. degree program results from the need to educate professionals beyond the bachelor's level in a synthesis of diverse disciplines, each of which views the marine environment in disparate ways. This degree program is designed to serve the needs of working professionals with training and education beyond the bachelor's degree. Applicants with any undergraduate major will be considered for admission. A science major is most useful and a science background is essential. The MES degree is broadly based, without the management emphasis of CZM.

Ph.D. in Oceanography/Marine Biology

The Ph.D. degree in oceanography consists of upper-level course work and original research on a selected topic of importance in the ocean sciences. Course

work consists of required general core courses and tutorial studies with the major professor. The program is informally divided into physical oceanography and marine biology.

Distance Education

Nova Southeastern University is a recognized pioneer in distance education and was ranked as one of the nation's top 20 "cyber-universities" by *Forbes* magazine. The Oceanographic Center reflects this tradition by offering flexible certified distance education courses for graduate credit (M.S.), undergraduate, or general interest (audit). Our distance education courses may be taken "stand alone," as a flexible component of a graduate program, or towards the four-course graduate certificate in coastal studies. A full distance M.S. in Coastal Zone Management is also in preparation. For more information about present and future distance course options, including the graduate certificate program, please visit the distance learning Web site at www.nova.edu/ocean/disted.html, or contact Jane Dougan, distance learning coordinator, at douganj@nova.edu.

Research

Research interests include modeling of large-scale ocean circulation, coastal dynamics, ocean-atmosphere coupling, surface gravity waves, biological and chemical

oceanography, coral reef ecology/assessment/restoration, Pleistocene and Holocene sea level changes, ecology of marine protists, marine zooplankton, calcification of invertebrates, cell ultrastructure, fouling effects, marine fisheries, molecular ecology and evolution, wetlands ecology, invasive species, and nutrient dynamics. Regions of interest include not only Florida's coastal waters and the continental shelf/slope waters of the United States, but also the waters of the Caribbean Sea, the Gulf of Mexico, and the Atlantic, Indian, and Pacific Oceans.

National Coral Reef Institute

NCRI is engaged in hypothesis-based, research-related activities designed to understand, protect, monitor, and restore coral reefs. Its mission is to conduct rigorous scientific research, education, and community service in ecology, monitoring, methods, restoration, and management of coral reefs, including those damaged or destroyed by natural or human-induced events.

The Guy Harvey Research Institute

Dedicated to research and education on the biology, ecology, biodiversity, and conservation of fish, the institute conducts solution-oriented basic and applied scientific research to generate and disseminate the information needed for effective conservation, restoration, biodiversity maintenance, enhancement, and understanding of the world's fish resources.

Sea Turtle Conservation

The Broward County sea turtle project provides for the conservation and improved understanding of endangered and threatened loggerhead, green, and leatherback sea turtles. During the nesting season, beaches are surveyed and most nests are carefully excavated and moved to designated relocation sites. This is done primarily to prevent loss of the hatchlings due to their disorientation by coastal lights on highly urbanized beaches.

Facilities

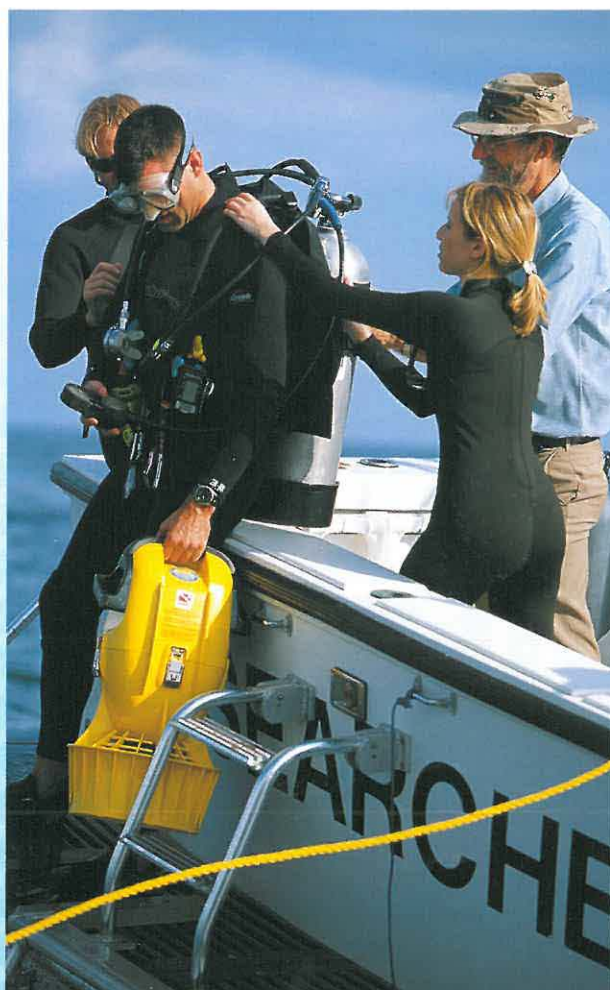
Laboratories and Offices

The center is located on a 10-acre site on the ocean side of Port Everglades, and has a one-acre boat basin. Its location affords immediate access to the Gulf Stream, the Bahama Banks, the Florida Straits, and the open sea. The center has several small research vessels available.

Comprising three buildings and a modular structure, the center's main building houses laboratories, conference room, workrooms, and offices. A second building contains a large two-story staging area; library; computing center; classroom; darkroom; machine and carpentry shops; and biology, electron microscopy, and electronics laboratories. Another building contains a wetlab/classroom, coral workshop, and X-ray facility. A filtered seawater system is also in use.

Computer Services

The Oceanographic Center has approximately 140 PCs on a LAN connected to main campus and the Internet for use by students and faculty and staff members. The student computer lab has 15 individual computer stations with networked Pentium computers connected to laser and inkjet printers. Various peripherals throughout the center include an HP 1055C large format poster printer, color flatbed scanners, and assorted imaging software and hardware. The center is linked to the Internet and NSU main campus via a T-1 network link. A wireless network allows indoor and outdoor access to the Internet from any location at the center.

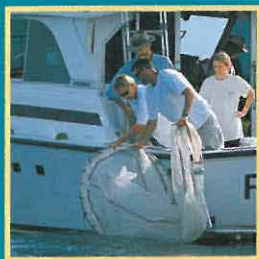


Come to Graduate School in South Florida

The Oceanographic Center of Nova Southeastern University invites you to study marine biology, marine environmental science, coastal zone management, and oceanography at our 10-acre, ocean-front site just south of Fort Lauderdale.

We offer

- **a wide range of M.S. graduate-level courses taught by 16 academic faculty members and an equal number of specialist adjunct and affiliate teaching faculty members**
- **small class sizes**
- **field courses in locations including Belize, the Bahamas, and the Florida Keys**
- **rolling admissions, enrollment opportunities four times per year (at the start of each quarter)**
- **a dynamic student environment with more than 150 M.S. graduate students**
- **an evening class format to accommodate working students**
- **an on-site PC lab for student computing**
- **a capstone option (review paper) allowing diligent students to obtain an M.S. degree in 18 months or less**
- **a research option (thesis) for selected students interested in laboratory and field research**
- **competitive tuition rates (Our rates are less than other private/independent universities in the area and the out-of-state rate for Florida's state universities.)**
- **a Ph.D. program in oceanography/marine biology for students wanting to pursue a higher degree**
- **financial aid (student loans) available (We also offer teaching assistantships and limited scholarships.)**
- **distance education courses including Coastal Policy, Internship in Coastal Policy, International Integrated Coastal Zone Management, Marine Mammal Management, Life on a Water Planet, and Environmental Sustainability: Choices for the Future (These can be taken for graduate credit, undergraduate credit, or certification.)**
- **a distance M.S. in Coastal Zone Management program (This can be taken entirely online or in combination with on-site courses.)**





For additional information contact:

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About Nova Southeastern University

NSU is the largest independent institution of higher education in the Southeast United States, with an enrollment of more than 26,000 students. The university has 4 campuses made up of the 16 academic centers, colleges, and schools that specialize in osteopathic medicine, pharmacy, optometry, allied health, medical sciences, dental medicine, law, oceanography, business and entrepreneurship, computer and information sciences, humanities and social sciences, education, psychology, family education, and undergraduate studies.

Nova Southeastern University admits students of any race, color, sex, age, nondisqualifying disability, religion or creed, sexual orientation, or national or ethnic origin to all the rights, privileges, programs, and activities generally accorded or made available to students at the school, and does not discriminate in administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other school-administered programs.

Nova Southeastern University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097, Telephone number: 404-679-4501) to award associate's, bachelor's, master's, educational specialist, and doctoral degrees.